

**ARIZONA GAME AND FISH DEPARTMENT  
HABITAT PARTNERSHIP COMMITTEE  
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number:	14-521
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**PROJECT INFORMATION**

<b>Project Title:</b> Moonshine Pasture Pipeline	
<b>Region and Game Management Unit:</b> GMU 35B in Region 5	
<b>Local Habitat Partnership Committee (LHPC):</b> • SEAZ HPC Committee	<b>Was the project presented to the LHPC?</b> YES[X] NO[]
<b>Has this project been submitted in previous years?</b> YES[] NO[x] <b>If Yes, was it funded?</b> YES[] NO[] → <b>Funded HPC Project #(s):</b>	
<b>Project Type:</b> Water Pipeline	
<b>Brief Project Summary:</b> Construct pipeline to preexisting USFS storage tank and trough to which lessee will pump water to and provide area wildlife with year round water.	
<b>Big Game Wildlife Species to Benefit:</b> Whitetail Deer, Javelina	

<b>Implementation Schedule</b> (Month/Day/Year):  <u>Project Start Date:</u> March 1 <sup>st</sup> , 2015  <u>Project End Date:</u> March 1 <sup>st</sup> , 2017	<b>Environmental Compliance:</b> NEPA Completed: Yes[] No[] N/A[x] Projected Completion Date: _____  State Historic Preservation Office - Archaeological Clearance: Yes[] No[x] N/A[] Projected Completion Date: <u>Will be completed by USFS</u>  Arizona Game and Fish Department EA Checklist: N/A[] To be Completed by: <u>M. Braun #584</u> Projected Completion Date: <u>March 2015 if funded</u>
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**PROJECT FUNDING**

<b>Special Big Game License Tag Funds Requested:</b>	<b>\$3,221</b>
<b>Cost Share or Matching Funds:</b>	<b>\$11,800</b>
<b>Total Project Costs:</b>	<b>\$ 15,021</b>

**PARTICIPANT INFORMATION**

<b>Applicant</b> (please print): Mark Byrum	<b>Address:</b> 182 Red Rock Canyon Road Patagonia, AZ 85624	<b>E-mail:</b> markbyrumsaddles@gmail.com
<b>Telephone:</b> 605-440-2455		<b>Date:</b> 8/21/14

<b>AGFD Contact and Phone No.</b> (If applicant is not AGFD personnel): M. Braun #584:623-237-1821
<b>Project has been coordinated with:</b> US Forest Service, Arizona Game and Fish, Byrum Ranch

**NEED STATEMENT – PROBLEM ANALYSIS:**

This area consists of excellent habitat for Coues whitetail deer and javelina, but it is very dry and lacks natural perennial water sources. Drought has caused a perennial spring in the area to go dry. There are very few year round water sources available in this part of the Canelo Hills and in Red Rock Canyon proper. This pipeline provides a source of permanent, year-long water to the Moonshine Pasture on the Coronado National Forest.

Winter helicopter surveys routinely count 15-25 deer and 20-25 javelina in the immediate vicinity of the project location.

An old US Forest Service water catchment use to provide water to this area. However, the apron broke apart and it no longer collects water. There is a functional 10,000 gallon water storage tank and trough (see picture below) at this site. The US Forest Service will allow the use of these materials for the project.



Access into the area is available. Access is gained through the Byrum Ranch. An AZGFD sign in box is located at the Ranch headquarters and hunters can cross the private property onto US Forest Service land just by signing in.

Addition of this water source will also allow the Byrum Ranch more options of rotating cattle pastures and will help keep cattle out of the riparian bottoms.

**PROJECT OBJECTIVES:**

Provide permanent water to the west end of Red Rock Canyon, Corral Canyon, and Moonshine Pasture while utilizing materials already on the ground.

**PROJECT DESCRIPTION AND STRATEGIES:**

The Byrum Ranch will make minor repairs and modifications to the trough and storage tank. They will then construct a pipeline from an already functional drinker approximately 0.65 miles away to the storage tank. Water will be pumped to the storage tank and the trough will be kept full yearlong. USFS will perform required biological and archeological clearances. Wildlife Manger Matt Braun will complete the AZGFD EA Checklist.

**PROJECT LOCATION:**

-Moonshine Allotment:

-Coordinates of Tie On: **N 31° 34.473 W 110° 41.711**

-Coordinates of Storage Tank: **N 31° 34.267 W 110° 42.144**

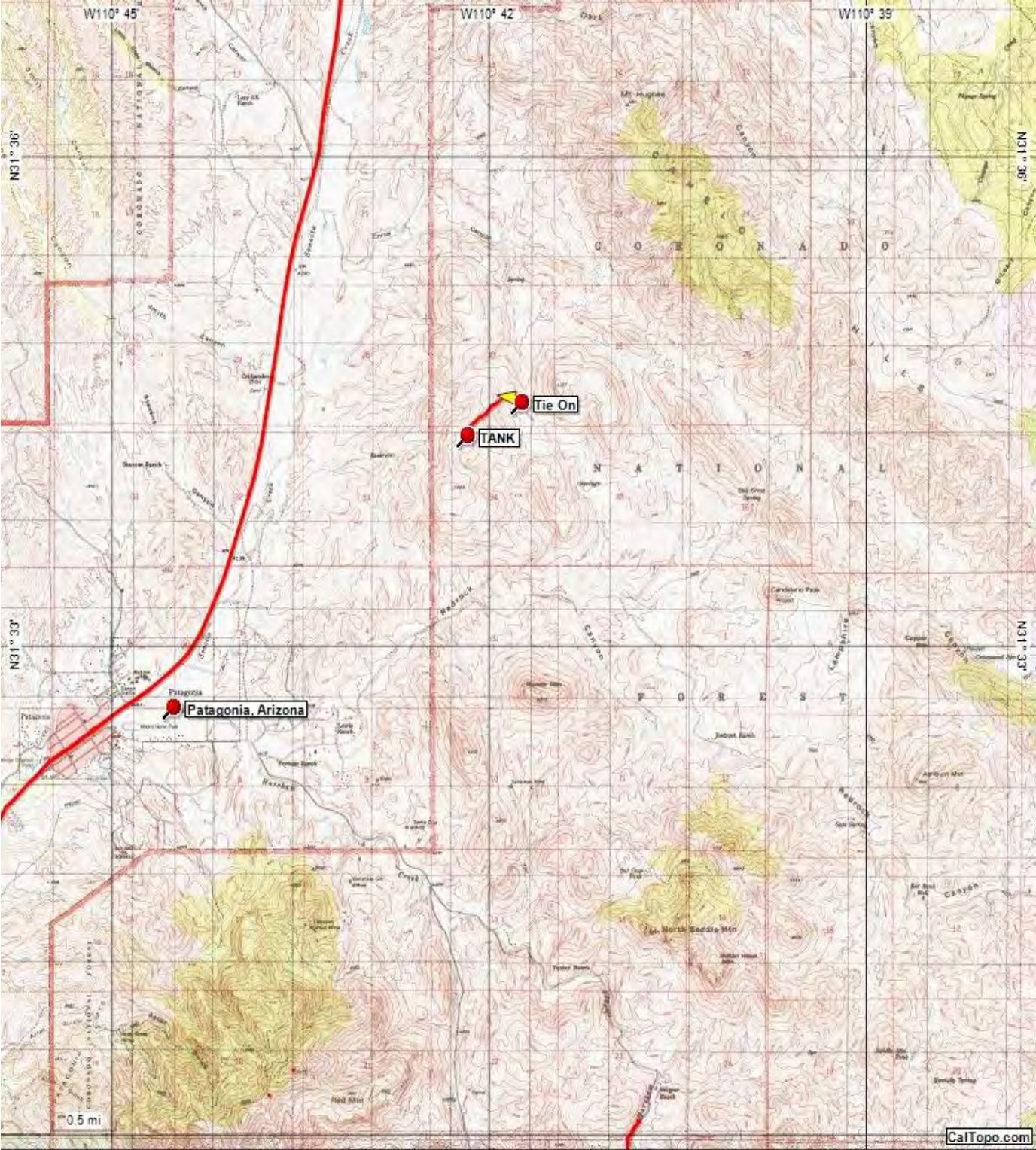
-Township: **21**

-Range: **S 16**

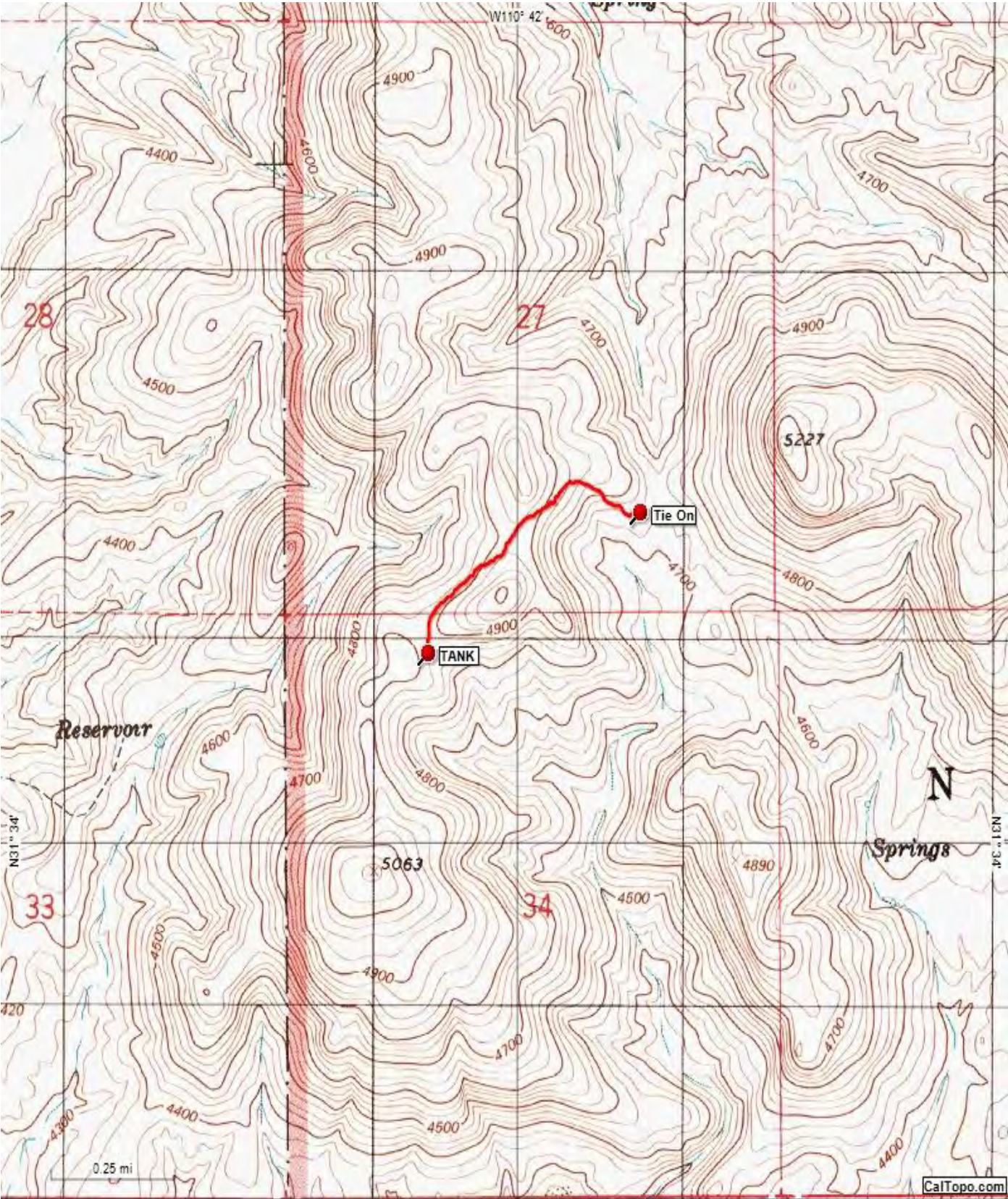
-Section: **E 27**

*-Also see provided maps below.*

**Proposed Project Overview:**



**Proposed Pipeline:**



**Aerial View of Proposed Pipeline:**



**LAND OWNERSHIP AT THE PROJECT SITE(S):**

US Forest Service Land-Sierra Vista Ranger District

**HABITAT DESCRIPTION:**

The habitat type is typically referred to as Madrean Oak Woodlands, comprised primarily of various oak species (*Quercus sp.*), Juniper (*Juniperus sp.*), pinion (*Pinus sp.*), manzanita (*Arctostaphylos sp.*), cliffrose (*Cowania mexicana*), yuccas (*Yucca sp.*), False Mesquite (*Calliandra eriophylla*), prickly pear cactus (*Opuntia sp.*), various native grasses and forbs. The area ranges from 4500-5000 foot elevation with a number of drainages and riparian areas cutting through the hills. These drainages consist of a variety of riparian species, including cottonwood (*Populus sp.*), Arizona walnut (*Juglans major*), and willow (*Salix sp.*).

**ITEMIZED USE OF FUNDS:**

Special Big Game License Tag Funds

3960' of 1 1/4" black poly pipe at \$.65 per foot	\$2593.00
Fiberglass to seal seams on storage tank	\$160.00
1" float valve and ball for existing water trough	\$90.00
3 1 1/4" ball valves at \$30.00 each	\$90.00
3 1 1/4" rr unions at \$23.00 each	\$69.00
12 1 1/4" nipples at \$11.00 each	\$131.00
4 1 1/4" elbows at \$14.00 each	\$56.00
2 1 1/4" tees at \$16.00 each	\$32.00

Cost Share or Matching Funds (for volunteer labor rates please refer to the worksheet below)

10,000 Gallon Storage Tank(USFS):	\$7,000.00
Circular Trough(USFS):	\$400.00
Labor consisting of 2 men, 2 saddle horses, 2 pack horses each day 4 days at \$400.00 per day (Byrum Ranch):	\$1,600.00
Biological/Arc clearances (USFS):	\$2,800.00

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

Mark Byrum-C6 Ranch: Project planning, all labor installing pipeline, and maintenance

James Heiholt- USFS SVRD: Project planning and clearances

John Millican-NWTF: Project planning

Matt Braun-AZGFD: Project planning, EA Checklist, and completion report

**WOULD IMPLEMENTATION OF THIS PROJECT ASSIST IN PROVIDING, MAINTAINING,  
OR FACILITATING RECREATIONAL ACCESS?**

YES[X] NO[] N/A[]

**PROJECT MONITORING PLAN:**

Lessee will provide any mechanical repairs to water system. The 35B wildlife manager will conduct annual winter wildlife surveys and will monitor responses to improved water availability.

**PROJECT MAINTENANCE:**

Lessee will provide ongoing project maintenance on the pipeline and ensure trough has year round water.

**PROJECT COMPLETION REPORT TO BE FILED BY:**

M. Braun #584 or current wildlife manager

**WATER DEVELOPMENT PROJECTS** (*please use the worksheet below*):

Yes. See below.



## **ARIZONA GAME AND FISH DEPARTMENT** **WATER DEVELOPMENT WORKSHEET**

**PROJECT TITLE:** Moonshine Pasture Pipeline

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”** NO
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**  
N/A
- 3) **What is the estimated annual inches of precipitation for the area? (mark one)**  
2-4 4-6 6-8 8-10 10-12 12-14 14-16  >16
- 4) **Is there a perennial water source available to big game within four miles of this project?**  
  
YES (please complete #5 below) NO (skip #5 below)
- 5) **For the accessible, perennial water source nearest this project:**  
Name of water source: Various  
Type of water source (catchment, spring, dirt tank): Water Troughs with water pumped to them.  
Ownership of water source: USFS and maintained by lessee  
Distance in miles from project: Closest is .65 miles away.
- 6) **Is the target wildlife species a result of transplant efforts?** YES NO
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument). If private land, list landowner.**  
US Forest Service
- 8) **Please provide the following information about access to the proposed site:**  
Type of access (mark one): 2x4 vehicles 4x4 only foot only\*\*  
  
\*\*If foot access only: Distance in miles: 0.65 Approximate hiking time: 20 minutes  
  
-- Does access to this site require crossing private or tribal lands? YES NO  
  
-- Please describe any restrictions to public access:  
Access is granted by landowner. An AZGFD sign in box is located at C6 Ranch HQ.  
Those wanting access just have to sign in.
- 9) **Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**
- 10) **Was a site visit completed?** Yes No  
If Yes, please list personnel that attended and date.  
Matt Braun(#584 AZGFD), Mark Byrum(C6 Ranch), John Millican (NWTF)